PRODUCT PERFORMANCE / EFFICACY REVIEW

Mark Suarez, Entomologist - IB

DATE:

18 February 2009

EPA REG. NUMBER:

279-GGUU

PRODUCT NAME:

F6133 Insecticide

REGISTRANT:

FMC Corp. Agricultural Products Group

PM:

PM 13

REVIEWER:

Linda DeLuise

DECISION #.:

390502

DP BARCODE:

351094

ACTION:

R310.1

ACTIVE INGREDIENT(S):

129064, Zeta-Cypermethrin......0.05%

TYPE:

Outdoor, Broadcast Insecticide

OPPTS GUIDELINE(S):

810.3100

810.3500

MRID:

47361711

Submitted GLP? No.

SITES & PESTS

Outdoors:

Ants, incl. RIFA, Centipedes, Fleas

Broadcast,

(adult and larvae), Scorpions, Ticks,

Fire Ant

incl. those that may transmit Lyme

mound

disease or Rocky Mountain Spotted

Treatment

Fever.

LABEL APPLICATION RATES: 2.3 lb/1000 ft² or 100 lb/A (0.25 lb AI/A) or 45.36 kg/A –

broadcast

1 teaspoon per mound (~3.93 g/mound) – mound treatment

AI APPLICATION RATES:

Bifenthrin

90.72 g AI/A; 0.007856 g AI/mound

Zeta-Cypermethrin

22.68 g AI/A; 0.001965 g AI/mound

STUDY APPLICATION RATES: Variable; see summaries.

STUDY SUMMARIES:

MRID 47361711. Sommer, W. (2007) Efficacy of Zeta-cypermethrin for Control of Variety of Public Health Pests. Project Number: PDM/080/07. Unpublished study prepared by FMC Corp. 83 p.

The data submitted in MRID 47361711 were generated on furmulations containing the active ingredient zeta-cypermethrin. The MRID contained several studies that were combined into a single report. The repost covers field studies testing the effectiveness of zeta-cypermethrin against fire ants, when applied as a mound treatment or broadcast treatment and against fleas and ticks as a broadcast treatment.

The fire ant mound treatments were applied at rates of 0.043 and approximately 0.086 g AI/ mound. The minimum label application rate specified is 0.001965 g AI/A. The lowest rate tested is more than 20 times the label rate.

The fire ant broadcast application rate tested ranged from 0.075 to 0.15 lb AI/A. the minimum label application rate for broadcast control of fire ants is 0.05 lb AI/A. The lowest rate tested is 50% greater than the minimum label rate.

The flea and tick broadcast rate tested ranged from 0.12 to 0.225 lb AI/A. the minimum label application rate for broadcast control of fleas and ticks is 0.05 lb AI/A. The lowest rate tested is 140% greater than the minimum label rate.

Data cited:

MRID 46431205. Richman, D. 2004. Efficacy of F701D and Mustang 1.5 EW for Control of Scorpions. Unpublished. 36 pp.

[from DER dated 27 June 2006, M. Suarez]

The study submitted tested the efficacy of F701D (Zeta-cypermethrin and PBO) against the scorpion, *Centruroides vittatus*. The F701D dust was used to treat filter paper at a rate of either 1.14 or 1.72 mg AI/square yard. Scorpions placed onto the treated filter paper were knocked down within 2 hours. Mortality was assessed through 9 days. Scorpions were not killed by F701D, 4 DAT 85 to 90% of the scorpions recovered. The registrant has argued that recovery would be unlikely in the field.

The data provided do not support claims against scorpions.

MRID 45773901. Staetz, C. (2002) Efficacy of F701D and Mustang 1.5 EW for Control of Cockroaches, Termites and Fire Ants: Lab Project Number: P-3574: 194GCR02PP1. Unpublished study prepared by FMC Corporation. 53 p. {OPPTS 810.3500}

The data provided in MRID 45773901 are not applicable to the subject formulation. The data were generated through direct application to test arthropods or testing of residual efficacy on a plastic surface.

MRID 45909801. Richman, D. (2003) Efficacy of F701 Dust Formulation for Insect Pests: Lab Project Number: PDM-035-03: 2002SC146: 2002SC107. Unpublished study prepared by FMC Corporation. 33 p.

The data provided in MRID 45909801 are not applicable to the subject formulation. The data were generated through direct application of a dust formulation to the test arthropods or testing of residual efficacy.

MRID 47001501. Hilton, N. (2006) FMC Corporation: Response to the EPA Product Performance / Efficacy Review and Agency Comments Dated June 27, 2006. Project Number: FMC/DUST/111006. Unpublished study prepared by FMC Corp. Agricultural Products Group. 15 p.

The MRID was a rebuttal to a previous efficacy review. The outcome of the rebuttal does not affect the labeling of the subject product.

ENTOMOLOGIST'S COMMENTS AND RECOMMENDATIONS:

The data submitted and cited are insufficient to support the desired label claims against pests of public health concerned. The data are not prejudicial, meaning that the registrant may decide to attempt to add the pests through a subsequent amendment by submitting or citing adequate data.

Remove the all reference to the following pests from the label:

- 1. Fire ants; including mound, broadcast, and pad mounted electrical site treatments
- 2. Centipedes
- 3. Fleas
- 4. Ticks
- 5. Scorpions

Ants may remain on the label, but must be listed as "Ants (except Carpenter, Fire, Pharaoh, and Harvester ants)"

Enclosure 00279-00GGUU S825523-ER